

In the Claims:

Please cancel claims 2, and 30-31 without prejudice.

Please amend the below claims as indicated below.

1. (currently amended) A method for distributing link state information by a node to a neighbor in a communication system, the method comprising:

sending a first link state advertisement protocol message to the neighbor; ~~and~~

sending a second link state advertisement protocol message to the neighbor prior to receiving an acknowledgement message from the neighbor for the first link state advertisement protocol message;

monitoring for an acknowledgement message from the neighbor for the first link state advertisement protocol message;

failing to receive the acknowledgement message from the neighbor for the first link state advertisement protocol message within a predetermined timeout period; and

retransmitting the first link state advertisement protocol message.

2. (cancelled)

3. (currently amended) The method of claim 12, further comprising:

retransmitting the second link state advertisement protocol message.

4. (cancelled)

5. (cancelled)

## 6. (cancelled)

7. (currently amended) A device for distributing link state information in a communication network, ~~the device comprising:~~

at least one processor and a non-signal computer readable medium, said non-signal computer readable medium having instructions stored thereon for execution on said processor, said instructions comprising

      a link state routing protocol having a sliding window mechanism with a window size greater than one (1) for sending up to a predetermined maximum number of link state advertisement protocol messages without receiving an acknowledgement for any of said link state advertisement protocol messages.

8. (currently amended) The device of claim 7, wherein the link state routing protocol comprises:

link state distribution logic operably coupled to generate link state advertisement protocol messages; and

sliding window logic responsive to the link state distribution logic and operably coupled to maintain a sliding window for sending up to a predetermined maximum number of link state advertisement protocol messages to a neighbor without receiving an acknowledgement for any of said link state advertisement protocol messages.

9. (original) The device of claim 8, wherein the sliding window logic is operably coupled to send a first link state advertisement protocol message to the neighbor and to send a second link state advertisement protocol message to the neighbor prior to receiving an acknowledgement message from the neighbor for the first link state advertisement protocol message.

10. (original) The device of claim 9, wherein the sliding window logic is operably coupled to monitor for an acknowledgement message from the neighbor for the first link state advertisement protocol message and to retransmit the first link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor for the first link state advertisement protocol message within a predetermined timeout period.

11. (original) The device of claim 10, wherein the sliding window logic is operably coupled to retransmit the second link state advertisement protocol message.

12. (original) The device of claim 8, wherein the sliding window logic is operably coupled to send the predetermined maximum number of link state advertisement protocol messages to the neighbor and to wait for an acknowledgement message from the neighbor for at least one of the link state advertisement protocol messages before sending another link state advertisement protocol message.

13. (original) The device of claim 12, wherein the sliding window logic is operably coupled to receive the acknowledgement message from the neighbor for a first link state advertisement protocol message and to send another link state advertisement protocol message.

14. (original) The device of claim 12, wherein the sliding window logic is operably coupled to retransmit at least a first unacknowledged link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor within a predetermined timeout period.

15. (currently amended) A program product comprising a non-signal computer readable medium having embodied therein a computer program for distributing link state information in a communication network, the computer program comprising a link state routing protocol having a sliding window mechanism with a window size greater than one (1) for sending up to a predetermined maximum number of link state advertisement protocol messages without receiving an acknowledgement for any of said link state advertisement protocol messages.

16. (previously presented) The program product of claim 15, wherein the link state routing protocol comprises:

link state distribution logic programmed to generate link state advertisement protocol messages; and

sliding window logic responsive to the link state distribution logic and programmed to maintain a sliding window for sending up to a predetermined maximum number of link state advertisement protocol messages to a neighbor without receiving an acknowledgement for any of said link state advertisement protocol messages.

17. (original) The program product of claim 16, wherein the sliding window logic is programmed to send a first link state advertisement protocol message to the neighbor and to send a second link state advertisement protocol message to the neighbor prior to receiving an acknowledgement message from the neighbor for the first link state advertisement protocol message.

18. (original) The program product of claim 17, wherein the sliding window logic is programmed to monitor for an acknowledgement message from the neighbor for the first link state advertisement protocol message and to retransmit the first link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor for the first link state advertisement protocol message within a predetermined timeout period.

19. (original) The program product of claim 18, wherein the sliding window logic is programmed to retransmit the second link state advertisement protocol message.

20. (original) The program product of claim 16, wherein the sliding window logic is programmed to send the predetermined maximum number of link state advertisement protocol messages to the neighbor and to wait for an acknowledgement message from the neighbor for at least one of the link state advertisement protocol messages before sending another link state advertisement protocol message.

21. (original) The program product of claim 20, wherein the sliding window logic is programmed to receive the acknowledgement message from the neighbor for a first link state advertisement protocol message and to send another link state advertisement protocol message.

22. (original) The program product of claim 20, wherein the sliding window logic is programmed to retransmit at least a first unacknowledged link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor within a predetermined timeout period.

23. (currently amended) A communication system comprising a node in communication with a neighbor, wherein the node includes at least one processor and a non-signal computer readable medium having embodied therein a computer program for, when executed on said processor, distributing link state information in a communication network, the computer program comprising a link state routing protocol having a sliding window mechanism with a window size greater than one (1) for sending up to a predetermined maximum number of link state advertisement protocol messages to the neighbor without receiving an acknowledgement for any of said link state advertisement protocol messages from the neighbor.

24. (original) The communication system of claim 23, wherein the node is operably coupled to send a first link state advertisement protocol message to the neighbor and to send a second link state advertisement protocol message to the neighbor prior to receiving an acknowledgement message from the neighbor for the first link state advertisement protocol messages.

25. (original) The communication system of claim 24, wherein the node is operably coupled to monitor for an acknowledgment message from the neighbor for the first link state advertisement protocol message and to retransmit the first link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor for the first link state advertisement protocol message within a predetermined timeout period.

26. (original) The communication system of claim 25, wherein the node is operably coupled to retransmit the second link state advertisement protocol message.

27. (original) The communication system of claim 23, wherein the node is operably coupled to maintain a sliding window for sending up to a predetermined maximum number of link state

advertisement protocol messages to the neighbor, to send the predetermined maximum number of link state advertisement protocol messages to the neighbor, and to wait for an acknowledgement message from the neighbor for at least one of the link state advertisement protocol messages before sending another link state advertisement protocol message.

28. (original) The communication system of claim 27, wherein the node is operably coupled to receive the acknowledgement message from the neighbor for a first link state advertisement protocol message and to send another link state advertisement protocol message.

29. (original) The communication system of claim 27, wherein the node is operably coupled to retransmit at least a first unacknowledged link state advertisement protocol message upon failing to receive the acknowledgement message from the neighbor within a predetermined timeout period.

30. (cancelled)

31. (cancelled)